



UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/663,878 09/15/00 IINO

A S004-4102

EXAMINER

MM91/1017

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BLIDD, M

ART UNIT

PAPER NUMBER

2834

DATE MAILED:

10/17/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 663878

Applicant(s) Tino et al

Examiner M. B. D.

Group Art Unit 2834

— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

Period for Reply

3

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- ☐ Responsive to communication(s) filed on _____
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

1-12

- ☒ Claim(s) _____ is/are pending in the application.
- Of the above claim(s) _____ is/are withdrawn from consideration.
- ☒ Claim(s) 12 is/are allowed.
- ☒ Claim(s) 1-10 is/are rejected.
- ☒ Claim(s) 11 is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement

Application Papers

- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some* ☐ None of the:
 - ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____
 - ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

*Certified copies not received: _____

Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

Office Action Summary

Art Unit: 2834

Claims 4-7 and 13-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims are vague and indefinite. Claims 4-7 are indefinite in that they include structurally device configurations as alternatives. One cannot determine what is actually being claimed is the rotor rotated and if so, how? Or, is a standing wave provided, and if so by what means? In claims 13-20, there is no proper antecedent basis for "the linear motion--- or swinging mechanism". The claims are also confusing in their alternative nature. Claims 21-28 are vague and indefinite in that it is unclear what constitutes 'an optical intensity'. Further, there is no optical source from which an intensity could be varied. Thus, one cannot determine the metes and bounds of these claims.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honda or Miyata.

Honda and Miyata teach an ultrasonic motor the output of which is converted by a cam mechanism. The resultant linear movement can be two way rather than in a single direction.

Art Unit: 2834

This difference is considered to be dictated by the use selected for the motor and would have been within the skill expected of the routineer to provide. Likewise, addition of appropriate necessary loading (spring bias) would have been obvious to one of ordinary skill in the art.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Honda or Miyata in view of Zumeris or Sager.

Honda and Miyata teach the ultrasonic motor as noted above. They do not use a rack and pinion motion conversion. However, use of rack and pinion as an output for ultrasonic elements is well known as demonstrated by Zumeris or Sager. Selecting from among known motion conversion as gearing outputs would be within the skill expected of the routineer and therefore would have been obvious to one of ordinary skill in the art.

Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Honda or Miyata in view of Adachi or Shibuya.

Monda and Miyata have been discussed above. Adachi and Shibuya teach a swing output is well known as an output for ultrasonic motors. Selection from among known motion conversion mechanisms would have been obvious to one of ordinary skill in the art.

Claim 11 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 12 is allowed.

Serial Number: 09/663,878

Page 4

Art Unit: 2834

Due to the confusing nature of claims 4-7 and 13-28 prior art cannot be applied at this time.

Further cited are Tsukada Naka and Kosugi.

Budd/ds

10/11/01

MARK D. BUDD
PRIMARY EXAMINER
ART UNIT 212